Darfurians Displacement Analysis: Security Vs. Economy

DCPSF Phase 2 - October 2013

Introduction

Darfur Community Peace and Stability Fund (DCPSF) was set up to address community level conflicts peace-building activities and foster social cohesion by drawing diverse communities together through processes of dialogue and consultations and address root causes of conflict through various activities that provide dividends of peace in Darfur.

DCPSF Phase 2, which covers from 2011 to 2015, continues with the same goal to stabilize communities and restore trust and confidence between communities paving the way towards early recovery.

DCPSF has in the past two years carried out Darfur wide conflict analysis workshops and draw from different actors in Darfur, the hotspots, issues of conflict and actors of conflict from which DCPSF is able to prioritize thematic issues to be addressed.

Following are the key topics that investigate displacement via conflict analysis carried out in 2013 with a lens of community level conflicts and their actors.

1. Conflict Hotspot Localities in Darfur
2. **Root Structural Causes of Conflict**
3. Hidden Causes of Conflict
4. Conflict Resolution Remedies

UNAMID

Main Hypotheses

1. Former conflicts is manifested in economic marginalization, governance and political representation and unequal distribution of services in Darfur compared to the rest of Sudan

Other Hypotheses/Causes

1. Tribal Tension
2. Local Power Relations
3. Land Ownership
4. Ethnic Tension

Description of Data

• Data obtained from primary and secondary sources and integrated into one dataset of 1200 observations.

• Primary data were collected via dispatching specialized ethno-linguistic teams to carry out pre-authorized interviews, surveys, and questionnaires in localities of Darfur.

• Secondary Data was collected from different regional indexes such as Arab Democracy Barometer Wave 3, and Sudan Official Statistics of Darfur destroyed villages.

Data Challenges

• No Interviews were possible to be conducted – at that time – to investigate reasons of violence of committers

• Missing values have been replaced either by the medians or by a global constant “Unknown”, and in some cases, mice computation code in R.

• Data collection processes had major delays and technical issues due to security concerns and instability

• High quality data integration requires combining data from multiple coherent and trust-worthy sources. Unfortunately, due to the lack of insufficient data and the reliability issues of the secondary data, several models have been tested on several data subsets in order to verify the quality.

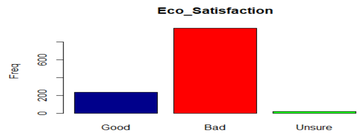
• Noisy data have been dealt with via Binning methods.

• All respondents did not provide their ethnicity. Thus, first and second language features used to indicate to ethnicity.

• Data transformation required to import different files types of over than 150000 observation, mainly from Stata file and transform it into R and then xls file. Some problems were related to transposing.

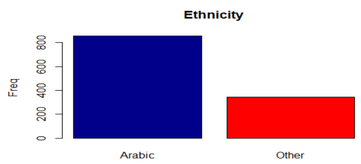
Visualization of Key Features

• Economic Satisfaction

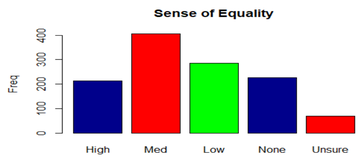


• Employment

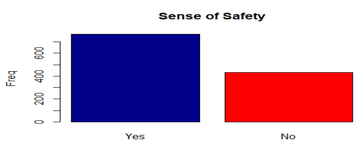
• Ethnicity



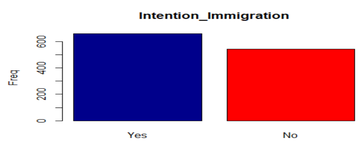
• Sense of Equality



• Sense of Safety

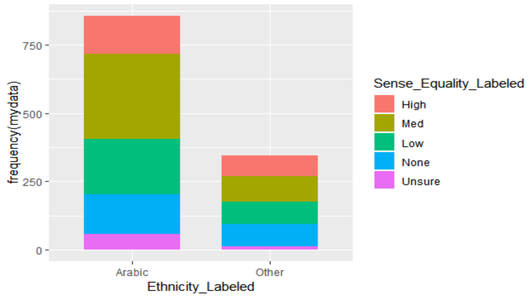


• Intention to Immigrate

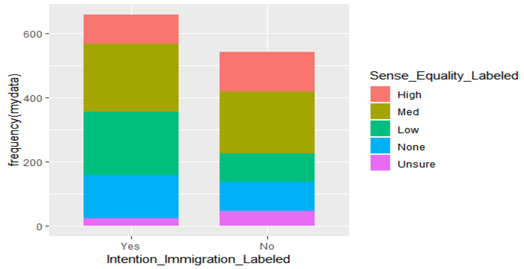


More Visualization

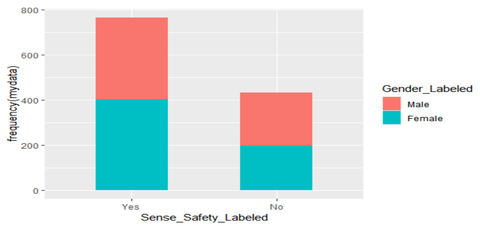
• Sense of Equality by Ethnicity



• Immigration by Sense of Equality

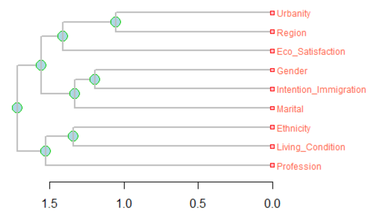


• Sense of Safety by Gender



• Sense of Equality by Gender

Pearson Correlations



Models Results

```
glm(formula = Sense_Safety_Labeled ~ Intention_Immigration_Labeled +
    Region_Labeled + Urbanity_Labeled + Gender_Labeled + Eco_Satisfaction_Labeled +
    Marital_Labeled + Living_Condition_Labeled + Profession_Labeled +
    Ethnicity_Labeled, family = binomial, data = Binary_Logistic_Data)

Deviance Residuals:
     Min       1Q   Median       3Q      Max
-2.0173  -0.8018  -0.4347   0.9036   2.7468

Coefficients: (1 not defined because of singularities)
                                 Estimate Std. Error z value Pr(>|z|)
(Intercept)                    -2.51908    0.31191  -8.076 6.68e-16 ***
Intention_Immigration_LabeledNo -0.46894    0.15054  -3.115  0.00184 **
Region_LabeledN.Darfur           2.01309    0.18863  10.672  < 2e-16 ***
Region_LabeledS.Darfur           1.47319    0.19634   7.503 6.22e-14 ***
Region_LabeledE.Darfur         -15.49297  362.10218  -0.043  0.96587
Region_LabeledW.Darfur           2.16258    0.29932   7.225 5.01e-13 ***
Urbanity_LabeledRural           -0.37270    0.15652  -2.381  0.01725 *
Gender_LabeledFemale            -0.28348    0.15225  -1.862  0.06262 .
Eco_Satisfaction_LabeledBad      1.65834    0.22642   7.324 2.41e-13 ***
Eco_Satisfaction_LabeledUnsure   0.94479    0.63640   1.485  0.13766
Marital_LabeledMarried          -0.07107    0.19880  -0.358  0.72071
Marital_LabeledDivorced          0.26843    0.40128   0.669  0.50354
Living_Condition_LabeledSimilar  1.02579    0.22828   4.494 7.00e-06 ***
Living_Condition_Labeledworse   -0.09494    0.18726  -0.507  0.61214
Living_Condition_LabeledUnsure   0.69223    0.60920   1.136  0.25584
Profession_LabeledEmployed       0.06112    0.20902   0.292  0.76996
Profession_LabeledUndeclared          NA         NA      NA       NA
Ethnicity_LabeledOther           0.21591    0.16423   1.315  0.18863
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 1570.5  on 1199  degrees of freedom
Residual deviance: 1229.6  on 1183  degrees of freedom
AIC: 1263.6

Number of Fisher Scoring iterations: 15
```

```
Deviance Residuals:
     Min       1Q   Median       3Q      Max
-1.8574  -0.9960  -0.6204   1.0639   2.0940

Coefficients: (1 not defined because of singularities)
                                 Estimate Std. Error z value Pr(>|z|)
(Intercept)                    -0.149514   0.236261  -0.633 0.526842
Region_LabeledN.Darfur         -0.002614   0.176275  -0.015 0.988169
Region_LabeledS.Darfur         -0.056704   0.184889  -0.307 0.759078
Region_LabeledE.Darfur         -0.166929   0.359929  -0.464 0.642803
Region_LabeledW.Darfur         -1.223163   0.306221  -3.994 6.49e-05 ***
Urbanity_LabeledRural           0.214799   0.136700   1.571 0.116109
Gender_LabeledFemale            0.574967   0.137296   4.188 2.82e-05 ***
Eco_Satisfaction_LabeledBad    -0.554963   0.166855  -3.326 0.000881 ***
Eco_Satisfaction_LabeledUnsure  0.339234   0.568650   0.597 0.550801
Marital_LabeledMarried          0.888957   0.175817   5.056 4.28e-07 ***
Marital_LabeledDivorced         0.867420   0.362171   2.395 0.016618 *
Living_Condition_LabeledSimilar -0.361212   0.211662  -1.707 0.087906 .
Living_Condition_Labeledworse  -0.273312   0.165713  -1.649 0.099085 .
Living_Condition_LabeledUnsure -0.636241   0.612281  -1.039 0.298744
Sense_Safety_LabeledNo         -0.431739   0.148717  -2.903 0.003695 **
Profession_LabeledEmployed      0.148388   0.183387   0.809 0.418428
Profession_LabeledUndeclared          NA         NA      NA       NA
Ethnicity_LabeledOther         -0.572374   0.149294  -3.834 0.000126 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 1652.3  on 1199  degrees of freedom
Residual deviance: 1475.9  on 1183  degrees of freedom
AIC: 1509.9

Number of Fisher Scoring iterations: 4
```

Conclusion

• Urbanity drives less Darfurians to relocate

• Economic marginalization drives more Darfurians to relocate

• Lack of safety and security drivers more Darfurians to relocate

• Surprisingly, other non-Arabic ethnicities tend less to relocate despite the rising waves of violence against them

Recommendation

Root causes of conflict along Migratory routes identified in 2012 – farmers, pastoralists, IDPs and host communities identified in 2012- needs to be addressed